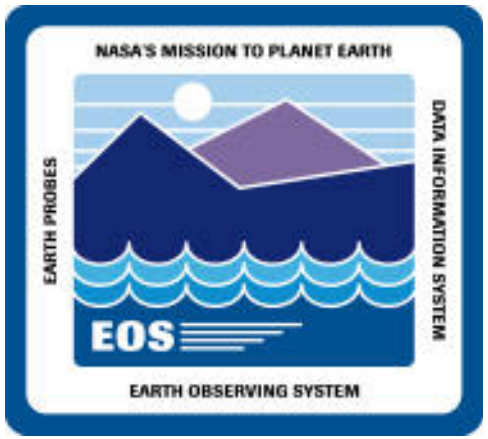

Hardware Procurement

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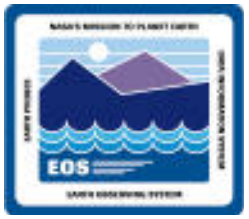
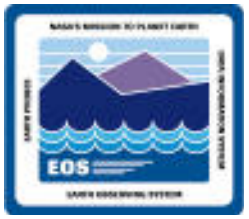
Hardware Procurement: Phasing Issues



- **Original concept called for three phases:**
  - **1.2X at Release B installation to handle SSI&T and at-launch requirements**
  - **1X in time for 1 year after launch (to handle initial reprocessing loads)**
  - **2X in time for 2 years after launch (to handle maximum reprocessing loads)**

- **Issues**
  - **An additional installation is required for TRMM launch + 1 capacity**
  - **The installation date for AM-1 launch + 1 capacity should be moved out as much as possible to avoid confusion close to launch date**
  - **Uncertainties in processing requirements suggest that we need a different (more flexible) approach to the first buy -- to verify instrument team estimates using real algorithm results**
  - **Cost savings could be achieved by moving buying some components later (i.e., to realize one year's savings in equipment and maintenance costs)**

Initial / Final Buys for At-Launch Phasing Approach

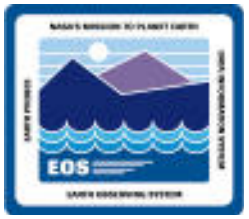


- **Objective: to buy only the capacity required for initial system testing**

- **Recommendation**
  - **DPS: Initially deliver one fully configured system (all expected CPUs, RAM, and disk at each DAAC); other systems would contain at least one CPU board each, one RAID cabinet, and 128MB RAM**
  - **DSS: Initially deliver one fully populated silo (all read/write heads); additional silos would be minimally configured**
  - **Other systems: Deliver full-up systems in initial Release B buy**

- **Applies to large DAACs only (GSFC, EDC, and LaRC)**
- **Initial delivery is per original schedule -- Dec - Apr `97**
- **Final delivery to be completed 3 months prior to AM-1 launch**

Initial / Final Buys for At-Launch Assumptions

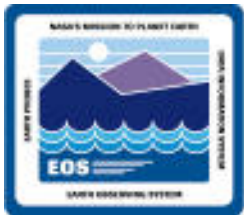


Assumptions

- Processing performance will be tested against technical baseline (i.e., AHWGP-provided estimates) since algorithms will be incomplete by Release B RRR
- Performance can be effectively tested by developing a benchmark to measure processor and I/O capacity
  - Benchmark would measure performance with science code fragments that are similar to final expectations (to compare SGI's machine rating to real performance)
  - Scalability within a box (number of CPUs and I/O channels would be demonstrated; scalability across hosts would be proved by analysis
- Delivered configuration will be selected so as to simplify later installations, e.g., with all expected boxes, so that only CPU boards, RAM, and disks would be added later

Next Step: Develop testing approach given stated assumptions; confirm recommended delivery configuration

Hardware Phasing: Schedule



• Issue AM-1 “Initial Buy” P.O.s	14 Aug ‘96
• Complete Release B DAAC Installations	Dec - Apr ‘97
• Release B RRR	1 Sep ‘97
• *Issue AM-1 “Final” P.O.s for at-launch capacity and TRMM launch + 1 capacity*	*30 Oct ‘97*
• *Complete DAAC Installation and burn-in*	*Jan - Mar ‘98*
• AM-1 Launch	30 Jun ‘98
• Issue P.O.s for AM-1 launch + 1 capacity	30 Oct ‘98
• *Complete DAAC installation and burn-in L+1*	*Jan - Mar ‘99*
• Issue P.O.s for AM-1 launch + 2 capacity	30 Oct ‘99
• Complete DAAC installation and burn-in L+2	Jan - Mar ‘00